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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,983	07/25/2003	Ravi R. Joshi	WUR 50897/US/2	4142
7590 08/24/2005			EXAMINER	
Patent Counsel			ROBERTSON, JEFFREY	
Huntsman Polyurethanes 10003 Woodloch Forest Drive			ART UNIT	PAPER NUMBER
The Wodlands, TX 77380			1712	
		DATE MAILED: 08/24/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Comments	10/626,983	JOSHI ET AL.				
Office Action Summary	Examiner	Art Unit				
	Jeffrey B. Robertson	1712				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 31 Ma	☐ Responsive to communication(s) filed on <u>31 May 2005.</u>					
2a) ☐ This action is FINAL . 2b) ☑ This	This action is FINAL . 2b)⊠ This action is non-final.					
3) Since this application is in condition for allowan	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E.	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4)⊠ Claim(s) <u>1-20</u> is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-4</u> is/are rejected.						
7)⊠ Claim(s) <u>5-20</u> is/are objected to.	☐ Claim(s) <u>5-20</u> is/are objected to.					
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9) The specification is objected to by the Examiner	·					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the o	frawing(s) be held in abeyance. See	37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachment(s)						
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 7/25/03. 	4) Interview Summary (Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:	PTO-413) te atent Application (PTO-152)				

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DETAILED ACTION

Election/Restrictions

1. Applicant's election of group I, claims 1-20 in the reply filed on 5/31/05 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). The examiner notes the cancellation of the non-elected claims.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claim 1 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/714,986. Although the conflicting claims are not identical, they are not patentably distinct from each other because both claims require the presence of a

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reaction system including an isocyanate and an isocyanate reactive component and a continuous fiber-reinforcing material, where there are initially free isocyanate and free alcoholic groups in the composition. Claim 1 of the '986 application has a gel time requirement of between 340-768 seconds at 25 degrees Celsius whereas claim 1 of the instant application has a gel time requirement of greater than 768 seconds at 25 degrees Celsius. The examiner's position is that one of ordinary skill in the art would not have expected that mixtures having gel times including 768 seconds and mixtures having gel times of greater than 768 seconds such as 768.000001 seconds to perform differently. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to select gel times slightly greater than 768 second as part of routine optimization and experimentation. It is noted that claim 1 of the '986 application requires gel times between 95-210 seconds at 140 degrees Celsius. The examiner's position is that this range would inherently include gel times of less than 120 seconds at 175 degrees Celsius.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

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The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
 - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1-4 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Cheolas et al. (US 2004/0094859 A1).

For claim 1, Cheolas teaches the presence of a reaction system including an isocyanate and an isocyanate reactive component and a continuous fiber-reinforcing material, where there are initially free isocyanate and free alcoholic groups in the composition. See paragraphs [0010]-[0013]. Cheolas teaches gel times of greater than 768 seconds at 25 degrees Celsius. See paragraph [0168], first two entries of Table 11 and paragraph [0171], second entry of Table 12. Cheolas does not specifically teach gel times of less than 120 seconds at 175 degrees Celsius. The examiner's position is that the above detailed examples of Cheolas would inherently include gel times of less than 120 seconds at 175 degrees Celsius.

For claim 2, the examiner's position is that the reaction system would inherently cure to form a thermosetting covalently crosslinked structure. For claims 3 and 4, there are no solvents or water added to the compositions.

9. Claims 1-4 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Cheolas et al. (WO 00/29459).

For claim 1, Cheolas teaches the presence of a reaction system including an isocyanate and an isocyanate reactive component and a continuous fiber-reinforcing

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material, where there are initially free isocyanate and free alcoholic groups in the composition. See page 1, lines 35-37 and page 2, lines 25-38. Cheolas teaches gel times of greater than 768 seconds at 25 degrees Celsius. See page 37, first two entries of Table 11 and page 38, second entry of Table 12. Cheolas does not specifically teach gel times of less than 120 seconds at 175 degrees Celsius. The examiner's position is that the above detailed examples of Cheolas would inherently include gel times of less than 120 seconds at 175 degrees Celsius.

For claim 2, the examiner's position is that the reaction system would inherently cure to form a thermosetting covalently crosslinked structure. For claims 3 and 4, there are no solvents or water added to the compositions.

10. Claims 1-4 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Credali et al. (U.S. Patent No. 5,382,626).

For claim 1, Credali teaches the presence of a reaction system including an isocyanate and an isocyanate reactive component and a continuous fiber-reinforcing material, where there are initially free isocyanate and free alcoholic groups in the composition. Col. 3, lines 15-65, col. 4, lines 5-68, and col. 7, lines 46-53. Credali teaches gel times of greater than 768 seconds at 25 degrees Celsius. See col. 14, Table 1, Table 2, and Table 3. Credali does not specifically teach gel times of less than 120 seconds at 175 degrees Celsius. The examiner's position is that the above detailed examples of Credali would inherently include gel times of less than 120 seconds at 175 degrees Celsius.

For claim 2, the examiner's position is that the reaction system would inherently cure to form a thermosetting covalently crosslinked structure. For claims 3 and 4, there are no solvents or water added to the compositions.

Allowable Subject Matter

11. Claims 5-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. None of the cited references teaches or suggests the specific limitations for the polyisocyanate composition and isocyanate reactive compositions set forth in these claims.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Fukami et al. (U.S. Patent No. 5,071,939), Ishida (U.S. Patent No. 5,294,461), Matsunaga et al. (U.S. Patent No. 5,391,665), and Kotschwar (U.S. Patent No. 5,614,575) are cited for general interest.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey B. Robertson whose telephone number is (571) 272-1092. The examiner can normally be reached on Mon-Fri 7:00-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

> John Billite Jeffrev B. Robertson **Primary Examiner**

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JBR